

Goddard Procedures and Guidelines

DIRECTIVE NO. GPG 5340.3D
EFFECTIVE DATE: March 21, 2003
EXPIRATION DATE: March 21, 2008

APPROVED BY Signature: Original Signed by
NAME: A. V. Diaz
TITLE: Director

Responsible Office: 300/Office of Systems Safety and Mission Assurance

Title: Preparation and Handling of Alerts, Safe Alerts and Advisories

PREFACE

P.1 PURPOSE

This procedure establishes a process for preparing and handling aerospace industry-wide Alerts, Safe Alerts and Advisories that affect or potentially affect the suitability of electronic parts and materials for use in Goddard Space Flight Center (GSFC) products or that affect or potentially affect personnel or system safety.

P.2 APPLICABILITY

This procedure applies to all GSFC products and processes covered by the scope of the GSFC Quality Management System. This procedure applies to all GSFC supervisors relative to provision of safety information to all GSFC employees.

P.3 AUTHORITY

- a. [NPD 8730.3](#), NASA Quality Management System Policy (ISO 9000)
- b. [NPG 8735.1](#), Procedures for Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government-Industry Data Exchange Program and NASA Advisories

P.4 REFERENCES

- a. Government-Industry Data Exchange Program (GIDEP) Operations Manual – SO300-BT-PRO-010
- b. [NPD 2110.1](#), Foreign Access to NASA Technology Transfer Materials
- c. [GPG 1710.1](#), Corrective and Preventive Action
- d. [GPG 5340.2](#), Control of Nonconforming Product
- e. [GPG 7120.2](#), Project Management
- f. [GPG 8700.2](#), Design Development
- g. [GSFC Form 4-37](#), Problem Impact Statement Parts, Materials, and Safety

P.5 CANCELLATION

GPG 5340.3C, Preparation and Handling of Alerts and Safe Alerts

P.6 SAFETY

None

P.7 TRAINING

None

P.8 RECORDS

Record Title	Record Custodian	Retention
Electrical, Electronic, and Electromechanical (EEE) Parts Information Management System (EPIMS) Database	Code 560, Electrical Systems Center	* NRRS 8/5A1 Permanent. Records may be retired to a Federal Records Center when 2 years old. Transfer to National Archives and Records Administration 15 years after completion of the project or when 25 years old, whichever is sooner.
Project Alert Impact Responses on GSFC Form 4-37	Code 302, System Reliability and Safety Office	* NPG 8735.1 Minimum of 5 years following completion of the program.

**NRRS – NASA Records Retention Schedules*

P.9 METRICS

See Process Metric on page 7 and 8.

P.10 DEFINITIONS

- a. Government-Industry Data Exchange Program (GIDEP) - A cooperative program that collects and distributes Alerts and Safe Alerts to participating organizations throughout the aerospace industry. The GIDEP program promotes awareness of quality, reliability, or safety problems discovered by users in the community. The GIDEP program also identifies field problems involving nonconforming materials, mechanism failures, and mechanical fastener problems.
- b. GIDEP Alert - a document for reporting a problem with parts, components, materials, specifications, software, facilities, manufacturing processes or test equipment that can cause a functional failure.
- c. GIDEP Alert Types - include Agency Action Notice (AAN) and Problem Advisory:
 - (1) AAN – A GIDEP document for redistributing problem information issued by a Government Agency to GIDEP participants.

- (2) Problem Advisory - A GIDEP document for reporting a problem with parts, components, materials, manufacturing processes, specifications, software, facilities, or test equipment that has an unknown or low probability of causing problems for other users.
- d. GIDEP Safe Alert - A GIDEP document for reporting a non-conforming item, product or situation that creates a safety hazard for personnel or equipment.
- e. NASA Advisory - A NASA document for exchanging significant parts, materials and safety problems or concerns among NASA activities.
- f. Alert Coordinator - Formal responsibilities are to review all alerts for adequacy before signing and releasing. Additional duties are included in the text and the cross-functional maps.
- g. Parts Identification List (PIL) - The Electrical, Electronic, and Electromechanical (EEE) parts used in a product, including such information as part number, manufacturer, date code, quantity used, location used, etc.
- h. EEE Parts Information Management System (EPIMS) - An on-line GSFC database, maintained by the GSFC Electrical Systems Center (Code 560), containing project parts identification lists and alert information. It can be used to determine if a part identified in an alert is used on projects or missions, which have input PILs.
- i. NASA Alert Reporting System (NARS) - The Electrical System Center (CODE 560) managed automated database, which includes EPIMS and provides and distributes the various GIDEP alert types, NASA Advisories, and reports to a subscriber list on a programmed basis.
- j. Project Point of Contact (PPOC) - The project authority that has the responsibility to disposition all the various GIDEP alert types and NASA Advisories.
- k. Product Design Lead (PDL) - The manager or leader with overall responsibility for managing the design activity, managing the technical and organizational interfaces identified during design planning, and where required, forming and leading the Product Design Team (PDT). The term refers to project managers, mission managers, instrument managers, subsystem technical managers, integrated product development team leaders, lead engineers, and any other personnel involved in the design activity. The PDL is the person who:
- (1) notifies the Alert Coordinator as to who represents the project as the Project Point of Contact for disposition of GIDEP alert types and NASA Advisories;
 - (2) plans an appropriate level of participation in the alert process; and
 - (3) provides support for the following activities: the development and update of PILs in the EPIMS/NARS database, the technical support for preparing an alert as part of a non-conformance disposition (see [GPG 5340.2](#) and [GPG 1710.1](#)), and the disposition of GIDEP alert types and NASA Advisories as described herein.

1. Systems Assurance Manager (SAM) - Code 300 person responsible for supporting the PDL in the coordination of the definition, coordination, and implementation of a Project Systems Safety and Mission Assurance Program.

PROCEDURES

1. The Office of Systems Safety and Mission Assurance shall appoint an Alert Coordinator to serve as the Center's focal point for the preparation and evaluation of the various GIDEP alert types, as the Center's point of contact with GIDEP, and as the Center's authority for issuing and disseminating GIDEP alert types and NASA Advisories.

Cross Functional Maps on pages 7 and 8 depict the implementation of GIDEP.

2. Preparation and Receipt of GIDEP alert types and NASA Advisories

2.1 The PDL should report product and safety problems to the Alert Coordinator when such problems fall within the definition of one of the GIDEP alert types or the NASA Advisory. In addition, safety problems reported through mishap, close call, or hazard reporting systems should be reported to the appropriate safety office at Greenbelt or Wallops.

2.2 Based upon the technical evaluation of the problem by the reporting individual or organization and existing or anticipated failure investigation reports, the Alert Coordinator shall determine if documentation of a GIDEP Alert or NASA Advisory is warranted. If the alert is warranted the Alert Coordinator will assist in the preparation, ensuring the alert is prepared in accordance with NPG 8735.1 and GIDEP Operations Manual.

Note 1: All internal generated alerts are assessed for impact to GSFC projects the same as the externally generated alerts.

Note 2: For all problems that deal with issues of suspected fraud, especially those related to the Office of Inspector General (OIG) advisories, the initiator shall take extra care to ensure that the information is processed only through official channels in order not to jeopardize any ongoing investigation by the OIG. If there is any question about the distribution of an OIG advisory as an Alert, the Alert Coordinator shall contact the OIG prior to distribution.

2.3 The NARS receives GIDEP alert types from GIDEP and installs them in the NARS database. Code 560 installs NASA Advisories into the NARS database.

2.4 Upon receipt of any manufacturer recall notice, the Alert Coordinator shall review the notice and determine an appropriate point of distribution, if applicable.

3. Internal Processing of GIDEP Alert Types and NASA Advisories

3.1 Safe Alerts

3.1.1 Safe Alert information deemed suitable for redistribution among the GSFC workforce will be maintained on an Internet web site by the System Safety and Reliability Office (Code 302) at the following address: http://ssro.gsfc.nasa.gov/Safety_Alerts/safealert.html.

3.1.2 The Systems Safety and Reliability Office will forward New Safe Alert titles and a link to the web site to Code 130 on a monthly basis, which will be included in the Goddard Newsletter for direct distribution to employees.

3.1.3 Engineering Review - The original GIDEP alert types received from GIDEP and all non-OIG NASA Advisories are reviewed by the Alert Coordinator for applicability, content, and completeness. If the Alert Coordinator believes that an OIG issued NASA Advisory has an impact at GSFC, then the Alert Coordinator shall ensure that the applicable OIG Advisory is processed and disseminated in a manner as not to jeopardize the OIG confidentiality requirements.

3.1.4 NARS (EPIMS Parts List) – the EPIMS database shall be used to perform a comparison and cross reference check of part numbers from the GIDEP alert types to EEE parts listed in project PILs that have been entered into EPIMS to determine whether or not a match exists to any of the projects. The alert type cross-reference results shall be provided to the Alert Coordinator for distribution to the Project Point of Contacts.

Note: PDLs/PDTs (including materials engineers reviewing project materials list) shall make use of the EPIMS/NARS in the selection, review, and evaluation of EEE parts, materials, and equipment (see [GPG 8700.2](#)).

4. Impact Evaluation, Action Taken, and Feedback

4.1 Project Points of Contact shall forward alerts/advisories to appropriate project personnel for impact evaluation and determination of required action per NPG 8735.1 and GPG 7120.2. The impact evaluation results may be provided to the Alert Coordinator by either one of the two following methods:

a. Completing sections 6a through 9 on [GSFC Form 4-37](#) per NPG 8735.1.

- (1) 6a - Impact Statement Preparer
- (2) 7 - Programs and Projects Impacted
- (3) 8 - Impact on Programs and Projects
- (4) 9 - Action Taken

Completion of sections 8 and 9 is required only when an impact has been cited in section 7.

b. Providing the information of sections 6a through 9 of [GSFC Form 4-37](#) in an electronic message. If an electronic message is used, section 6a does not require completion if the message sender is the same as the impact evaluator. Completion of sections 8 and 9 is required only when an impact has been cited in section 7.

4.2 The Alert Coordinator shall review all project responses. The project responses containing the information required by [GSFC Form 4-37](#) shall be placed in a project file that is located in the Office of the Alert Coordinator and saved for minimum of 5 years following the completion of the project.

5. External Distribution of GSFC Originated Alerts/NASA Advisories

5.1 Alert Coordinator provides Goddard-originated alerts to NARS. They are then forwarded by NARS to GIDEP for distribution.

5.2 Per [NPG 8735.1](#) all Goddard-originated NASA advisories shall be coordinated with the Center Office of the Chief Counsel. When the Manufacturer executes a statement of concurrence, the Alert Coordinator will provide a copy of the statement of concurrence, along with the entire content of the Advisory, to the Chief Counsel.

Note: The concurrence statement shall be signed by one who has the authority to sign legally binding documents for the manufacturer.

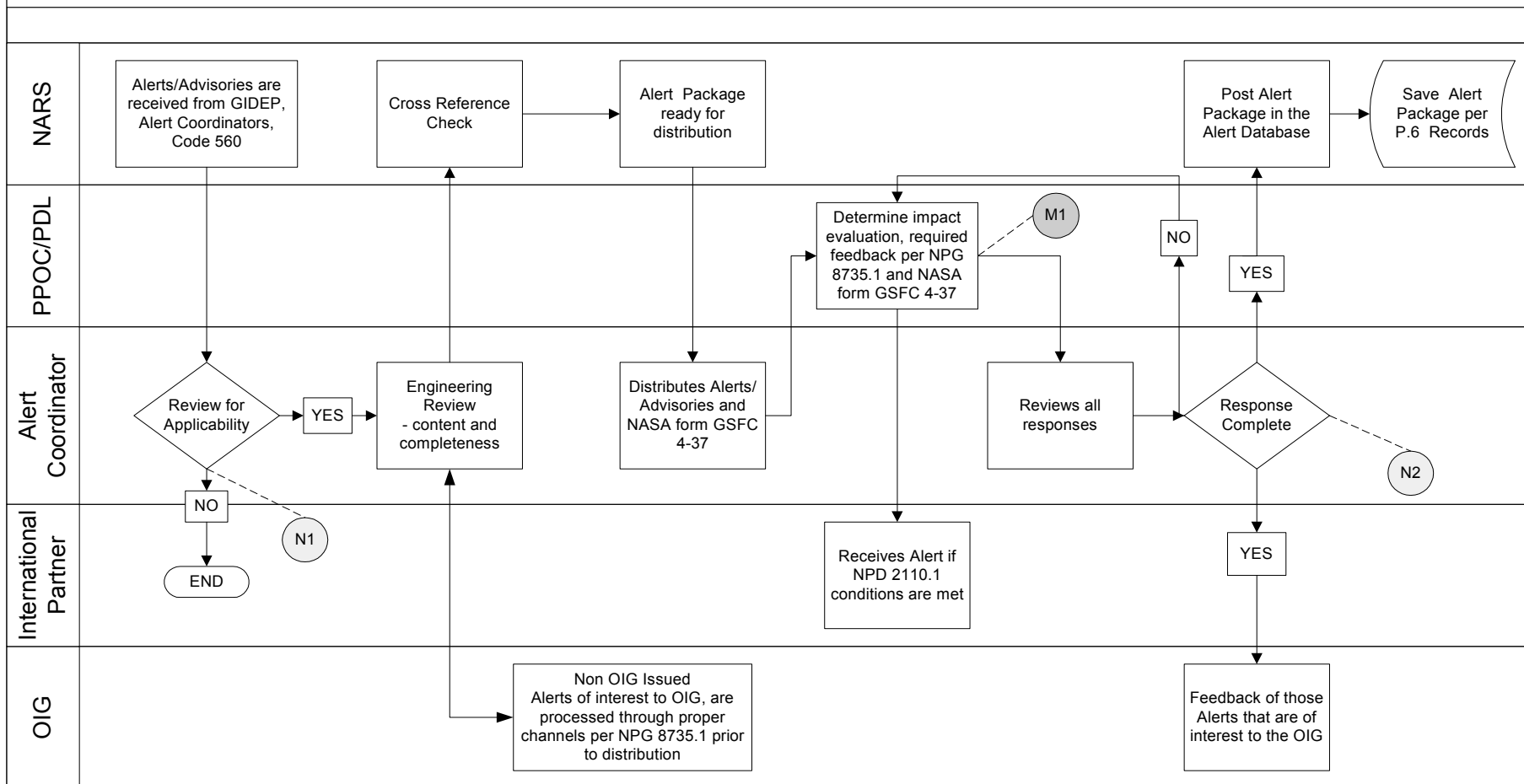
5.3 The Goddard-originated NASA Advisories shall be distributed by the Alert Coordinator to the following: the appropriate Center organizations, the Center and Headquarters Alert Coordinators, the NASA Office of the Inspector General in cases of suspected fraud, the EPIMS, and the Project Points of Contact.

5.4 The Alert Coordinator shall inform all PDLs involved with International partners of the following:

“NASA Programs/Projects that involve an international partner (such as the European Space Agency) require special review prior to distribution to the international partner of the GIDEP Alert, GIDEP Safe Alert, GIDEP Problem Advisory, GIDEP Agency Action Notice or NASA Advisory. Release of these documents shall be in accordance with [NPD 2110.1](#).”

Documents that relate to the international partner’s participation in a joint NASA/International partners program may be specifically released. Normally this means that they are related to components or parts utilized in the equipment contributed by the international partner. Further guidance may be obtained from the NASA Assessments and Technology Division (CODE ID) at NASA Headquarters and GIDEP.

GPG 5340.3 Preparation and Handling Of Alerts and Safe Alerts (External)



Process Metric - Work Days versus Goals

M1: Number of work days to prepare evaluations and forms and return to the Alert Coordinator

Notes:

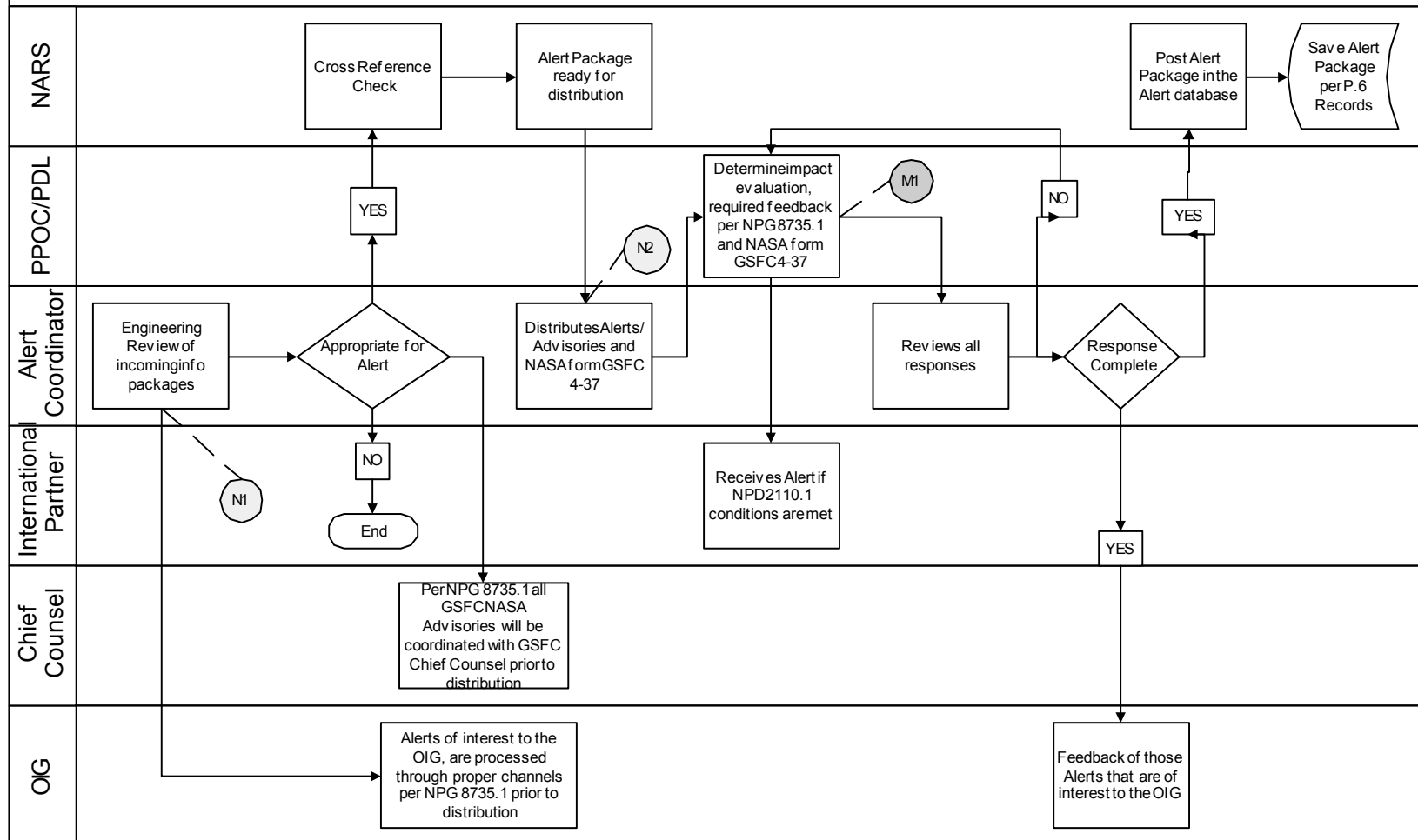
N1: Alerts initiated from OIG are processed through the proper channels per NPG 8735.1

N2: A waiver on completeness may be allowed if there's rationale on why the forms were not completed. The Alert Coordinator will make yes or no decision on what constitutes completeness.

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT

<http://gdms.gsfc.nasa.gov/gdms> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

GPG5340.3 Preparation and Handling Of Alerts and Safe Alerts (Internal)



Process Metric - Work days versus goals

M1: Number of work days to prepare evaluations and forms and return to the Alert Coordinator

Notes:

N1: Receive information relative to potential alert primarily from PDL's.
 N2: NASA Advisories are distributed through the NASA Centers and NASA Headquarters

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT

<http://gdms.gsfc.nasa.gov/gdms> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	08/12/98	Initial Release
A	10/6/98	Header and footer format changes. Rewrite of entire procedure.
B	04/21/99	<ul style="list-style-type: none"> - Re-worded P1 and 1(e) - Deleted references to GPG 8730.4 (canceled) in favor of GPG 7120.2. - Expanded instructions sections 2.4 through 2.6. - Deleted Alert and Problem Advisory Forms. - Corrected paragraph number references in flow charts. - Added Records table (P6).
C	11/07/01	Rewrite of entire procedure.
D	03/21/03	<ul style="list-style-type: none"> - Added sections P.6, P.7, P.9, P.10 to add common elements required in GPGs. - Changed Section 2.0 through 2.5 to 1.0 through 1.5. - Added new paragraph 2.4. - Changed paragraph 4.1 (was 2.4.1) - Changed 4.2 (was 2.4.2) - Revised the Process Metric section, represents current metric that is being reported.